

Amendments to the Claims

Please amend the claims as instructed in the marked-up version of the Listing of the Claims presented below. This Listing of the Claims replaces all prior versions, and listing of the claims in the application.

Listing of the Claims

1. (Currently Amended) A compressor and driving motor assembly, in which the motor is a hybrid permanent magnet motor providing an induction mode and a permanent magnet mode and comprises a rotor and a stator assembly, and the compressor is a rotary screw air compressor comprising a main body supporting first and second interengaged compressor rotors; and a substantially horizontal drive shaft having first and second portions, wherein one of the first and second compressor rotors is mounted on the drive shaft first portion and the motor rotor is mounted directly on the drive shaft second portion, the drive shaft first portion being vertically supported by the compressor main body and the drive shaft second portion is free of vertical support to provide cantilever support of the motor rotor, and wherein the drive shaft drives the compressor rotor mounted thereon and the interengagement between the first and second compressor rotors drives the other compressor rotor.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) An assembly according to claim 1, in which the motor rotor is shaped so as to have a central longitudinal aperture configured to fit to a corresponding tapered portion of the drive shaft second portion.

5. (Original) An assembly according to claim 1, in which the compressor has a housing, and the stator assembly is connected to the housing of the compressor.

6. (Original) An assembly according to claim 5, in which the stator assembly is directly connected to the housing.

7. (Original) An assembly according to claim 5, in which the stator assembly is connected to the housing by way of an adapter flange.

8. (Canceled)

9. (Canceled)

10. (Previously Presented) A rotary screw air compressor and driving motor assembly, the driving motor being a hybrid permanent magnet motor providing an induction mode and a permanent magnet mode.

11. (Original) An assembly according to claim 10, in which the compressor is an air compressor.

12. (Canceled)

13. (Original) An assembly according to claim 10, in which the motor is a fixed speed motor.

14. (Original) An assembly according to claim 10, in which the motor is a variable speed motor.

15. (Previously Presented) An assembly according to claim 10, in which the compressor is of oil-flooded type.

16. (Original) An assembly according to claim 10, in which the compressor is of oil-free type.

17. (Original) An assembly according to claim 10, in which the motor comprises a motor rotor which is mounted directly on to a drive shaft extending from a compressor rotor of the compressor.